

## **CLAIMS**

I claim:

1. An amusement ride with cable-launched carrier, which comprises:
  - one or more towers with at least one of said towers having a flexible upper portion;
  - a cable suspended from each tower, said cable having a first end and a second end;
  - a carrier for one or more participants attached to the second end of said cable; and
  - a means for propelling said carrier, said means for propelling being attached to said cable other than at the second end of said cable.
2. The amusement ride with cable-launched carrier as recited in claim 1, further rising:
  - a controllably rotatable seat attached to said carrier.
3. The amusement ride with cable-launched carrier as recited in claim 2, further rising:
  - a harness attached to a locking apparatus connected to said carrier.
4. The amusement ride with cable-launched carrier as recited in claim 3, further rising:
  - a device for maintaining tension in said cable attached to said cable.
5. The amusement ride with cable-launched carrier as recited in claim 2, further rising:
  - a device for maintaining tension in said cable attached to said cable.
6. The amusement ride with cable-launched carrier as recited in claim 1, further rising:
  - a harness attached to a locking apparatus connected to said carrier.
7. The amusement ride with cable-launched carrier as recited in claim 6, further rising:
  - a device for maintaining tension in said cable attached to said cable.

1           8. The amusement ride with cable-launched carrier as recited in claim 1, further  
2 comprising:  
3                 a device for maintaining tension in said cable attached to said cable.

1           9. The amusement ride with cable-launched carrier as recited in claim 1, wherein:  
2                 the means for propelling said carrier is a high-speed winch.

1           10. The amusement ride with cable-launched carrier as recited in claim 9, further  
2 comprising:  
3                 a controllably rotatable seat attached to said carrier.

1           11. The amusement ride with cable-launched carrier as recited in claim 10, further  
2 comprising:  
3                 a harness attached to a locking apparatus connected to said carrier.

1           12. The amusement ride with cable-launched carrier as recited in claim 11, further  
2 comprising:  
3                 a device for maintaining tension in said cable attached to said cable.

1           13. The amusement ride with cable-launched carrier as recited in claim 10, further  
2 comprising:  
3                 a device for maintaining tension in said cable attached to said cable.

1           14. The amusement ride with cable-launched carrier as recited in claim 9, further  
2 comprising:  
3                 a harness attached to a locking apparatus connected to said carrier.

1           15. The amusement ride with cable-launched carrier as recited in claim 14, further  
2 comprising:  
3                 a device for maintaining tension in said cable attached to said cable.

1           16. The amusement ride with cable-launched carrier as recited in claim 9, further  
2 comprising:  
3                 a device for maintaining tension in said cable attached to said cable.

1        17. The amusement ride with cable-launched carrier as recited in claim 1, wherein:  
2              the means for propelling said carrier comprises:  
3                  a fluid-powered cylinder, which comprises:  
4                      a cylinder having an aperture in a first end and an aperture in a  
5                      second end of said cylinder and also having a side and an interior;  
6                      a piston slidably mounted within said cylinder;  
7                      a continuous cable, said continuous cable passing through the  
8                      aperture in the first end of the cylinder and the aperture in the second end  
9                      of the cylinder and said continuous cable being attached to said piston; and  
10                     a valve for injecting the fluid to propel the piston, said valve being  
11                      near the first end of said cylinder.

1        18. The amusement ride with cable-launched carrier as recited in claim 17, further  
2           comprising:  
3                  a controllably rotatable seat attached to said carrier.

1        19. The amusement ride with cable-launched carrier as recited in claim 18, further  
2           comprising:  
3                  a harness attached to a locking apparatus connected to said carrier.

1        20. The amusement ride with cable-launched carrier as recited in claim 19, further  
2           comprising:  
3                  a device for maintaining tension in said cable attached to said cable.

1        21. The amusement ride with cable-launched carrier as recited in claim 20, further  
2           comprising:  
3                  a descent valve communicating with the interior of said cylinder.

1        22. The amusement ride with cable-launched carrier as recited in claim 21, further  
2           comprising:  
3                  an aperture in the side of said cylinder.

1        23. The amusement ride with cable-launched carrier as recited in claim 20, further  
2           comprising:  
3                  an aperture in the side of said cylinder.

1           24. The amusement ride with cable-launched carrier as recited in claim 19, further  
2 comprising:  
3                 a descent valve communicating with the interior of said cylinder.

1           25. The amusement ride with cable-launched carrier as recited in claim 24, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           26. The amusement ride with cable-launched carrier as recited in claim 19, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           27. The amusement ride with cable-launched carrier as recited in claim 18, further  
2 comprising:  
3                 a device for maintaining tension in said cable attached to said cable.

1           28. The amusement ride with cable-launched carrier as recited in claim 27, further  
2 comprising:  
3                 a descent valve communicating with the interior of said cylinder.

1           29. The amusement ride with cable-launched carrier as recited in claim 28, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           30. The amusement ride with cable-launched carrier as recited in claim 27, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           31. The amusement ride with cable-launched carrier as recited in claim 18, further  
2 comprising:  
3                 a descent valve communicating with the interior of said cylinder.

1           32. The amusement ride with cable-launched carrier as recited in claim 31, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           33. The amusement ride with cable-launched carrier as recited in claim 18, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           34. The amusement ride with cable-launched carrier as recited in claim 17, further  
2 comprising:  
3                 a harness attached to a locking apparatus connected to said carrier.

1           35. The amusement ride with cable-launched carrier as recited in claim 34, further  
2 comprising:  
3                 a device for maintaining tension in said cable attached to said cable.

1           36. The amusement ride with cable-launched carrier as recited in claim 35, further  
2 comprising:  
3                 a descent valve communicating with the interior of said cylinder.

1           37. The amusement ride with cable-launched carrier as recited in claim 36, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           38. The amusement ride with cable-launched carrier as recited in claim 35, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           39. The amusement ride with cable-launched carrier as recited in claim 34, further  
2 comprising:  
3                 a descent valve communicating with the interior of said cylinder.

1           40. The amusement ride with cable-launched carrier as recited in claim 39, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           41. The amusement ride with cable-launched carrier as recited in claim 34, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1           42. The amusement ride with cable-launched carrier as recited in claim 17, further  
2 comprising:  
3                 a device for maintaining tension in said cable attached to said cable.

1           43. The amusement ride with cable-launched carrier as recited in claim 42, further  
2 comprising:  
3                 a descent valve communicating with the interior of said cylinder.

1       44. The amusement ride with cable-launched carrier as recited in claim 43, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1       45. The amusement ride with cable-launched carrier as recited in claim 42, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1       46. The amusement ride with cable-launched carrier as recited in claim 17, further  
2 comprising:  
3                 a descent valve communicating with the interior of said cylinder.

1       47. The amusement ride with cable-launched carrier as recited in claim 46, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1       48. The amusement ride with cable-launched carrier as recited in claim 17, further  
2 comprising:  
3                 an aperture in the side of said cylinder.

1       49. The amusement ride with cable-launched carrier as recited in claim 17, wherein:  
2                 the first end of said cable is connected to said continuous cable.

1       50. The amusement ride with cable-launched carrier as recited in claim 17, further  
2 comprising:  
3                 a slide through which said cable moves substantially freely;  
4                 a transfer cable having a first end connected to said continuous cable and a second  
5                 end connected to said slide; and wherein:  
6                 the first end of said cable is attached to a structure which will hold the first end of  
7                 said cable substantially stationary.

1       51. The amusement ride with cable-launched carrier as recited in claim 1, wherein:  
2                 the means for propelling said carrier comprises:  
3                         a fluid-powered cylinder, which comprises:  
4                                 a cylinder having an aperture in a first end and also having a side  
5                             and an interior;

6                   a piston slidably mounted within said cylinder and available for  
7                   connection to a cable; and

8                   a valve for injecting the fluid to propel the piston, said valve being  
9                   near the first end of said cylinder.

1       52. The amusement ride with cable-launched carrier as recited in claim 51, further  
2                   comprising:

3                   a controllably rotatable seat attached to said carrier.

1       53. The amusement ride with cable-launched carrier as recited in claim 52, further  
2                   comprising:

3                   a harness attached to a locking apparatus connected to said carrier.

1       54. The amusement ride with cable-launched carrier as recited in claim 53, further  
2                   comprising:

3                   a device for maintaining tension in said cable attached to said cable.

1       55. The amusement ride with cable-launched carrier as recited in claim 54, further  
2                   comprising:

3                   a descent valve communicating with the interior of said cylinder.

1       56. The amusement ride with cable-launched carrier as recited in claim 55, further  
2                   comprising:

3                   an aperture in the side of said cylinder.

1       57. The amusement ride with cable-launched carrier as recited in claim 54, further  
2                   comprising:

3                   an aperture in the side of said cylinder.

1       58. The amusement ride with cable-launched carrier as recited in claim 53, further  
2                   comprising:

3                   a descent valve communicating with the interior of said cylinder.

1       59. The amusement ride with cable-launched carrier as recited in claim 58, further  
2                   comprising:

3                   an aperture in the side of said cylinder.

1       60. The amusement ride with cable-launched carrier as recited in claim 53, further  
2                   comprising:

an aperture in the side of said cylinder.

61. The amusement ride with cable-launched carrier as recited in claim 52, further comprising:  
a device for maintaining tension in said cable attached to said cable.

62. The amusement ride with cable-launched carrier as recited in claim 61, further comprising:  
a descent valve communicating with the interior of said cylinder.

63. The amusement ride with cable-launched carrier as recited in claim 62, further comprising:  
an aperture in the side of said cylinder.

64. The amusement ride with cable-launched carrier as recited in claim 61, further comprising:  
an aperture in the side of said cylinder.

65. The amusement ride with cable-launched carrier as recited in claim 52, further comprising:  
a descent valve communicating with the interior of said cylinder.

66. The amusement ride with cable-launched carrier as recited in claim 65, further comprising:  
an aperture in the side of said cylinder.

67. The amusement ride with cable-launched carrier as recited in claim 52, further comprising:  
an aperture in the side of said cylinder.

68. The amusement ride with cable-launched carrier as recited in claim 51, further comprising:  
a harness attached to a locking apparatus connected to said carrier.

69. The amusement ride with cable-launched carrier as recited in claim 68, further comprising:  
a device for maintaining tension in said cable attached to said cable.

70. The amusement ride with cable-launched carrier as recited in claim 69, further comprising:

3                   a descent valve communicating with the interior of said cylinder.

1       71.     The amusement ride with cable-launched carrier as recited in claim 70, further  
2 comprising:  
3                   an aperture in the side of said cylinder.

1       72.     The amusement ride with cable-launched carrier as recited in claim 69, further  
2 comprising:  
3                   an aperture in the side of said cylinder.

1       73.     The amusement ride with cable-launched carrier as recited in claim 68, further  
2 comprising:  
3                   a descent valve communicating with the interior of said cylinder.

1       74.     The amusement ride with cable-launched carrier as recited in claim 73, further  
2 comprising:  
3                   an aperture in the side of said cylinder.

1       75.     The amusement ride with cable-launched carrier as recited in claim 68, further  
2 comprising:  
3                   an aperture in the side of said cylinder.

1       76.     The amusement ride with cable-launched carrier as recited in claim 51, further  
2 comprising:  
3                   a device for maintaining tension in said cable attached to said cable.

1       77.     The amusement ride with cable-launched carrier as recited in claim 76, further  
2 comprising:  
3                   a descent valve communicating with the interior of said cylinder.

1       78.     The amusement ride with cable-launched carrier as recited in claim 77, further  
2 comprising:  
3                   an aperture in the side of said cylinder.

1       79.     The amusement ride with cable-launched carrier as recited in claim 76, further  
2 comprising:  
3                   an aperture in the side of said cylinder.

1       80.     The amusement ride with cable-launched carrier as recited in claim 51, further  
2 comprising:

3                   a descent valve communicating with the interior of said cylinder.

1        81.    The amusement ride with cable-launched carrier as recited in claim 80, further  
2 comprising:  
3                   an aperture in the side of said cylinder.

1        82.    The amusement ride with cable-launched carrier as recited in claim 51, further  
2 comprising:  
3                   an aperture in the side of said cylinder.

1        83.    The amusement ride with cable-launched carrier as recited in claim 51, wherein:  
2                   the first end of said cable is connected to said piston after the first end of said  
3                   cable has passed through the aperture in the first end of the cylinder.

1        84.    The amusement ride with cable-launched carrier as recited in claim 51, further  
2 comprising:  
3                   a slide through which said cable moves substantially freely;  
4                   a transfer cable having a first end connected to said piston and a second end  
5                   connected to said slide; and wherein:  
6                   the first end of said cable is attached to a structure which will hold the first end of  
7                   said cable substantially stationary.

1        85.    An amusement ride with cable-launched carrier, which comprises:  
2                   three towers with at least one of said towers having a flexible upper portion;  
3                   a cable suspended from each tower, each of said cables having a first end and a  
4                   second end;  
5                   a carrier for one or more participants attached to the second ends of said cables;  
6                   a fluid-powered cylinder, comprising:  
7                    a cylinder having an aperture in a first end and also having a side  
8                   and an interior;  
9                    a piston slidably mounted within said cylinder and available for  
10                  connection to a cable; and  
11                  a valve for injecting the fluid to propel the piston, said valve being near  
12                  the first end of said cylinder, wherein said cylinder is oriented with the valve  
13                  downward;

14           a slide through which said cable moves substantially freely;

15           a transfer cable having a first end connected to said piston and a second end  
16           connected to said slide;

17           a pulley around which the transfer cable bends between said cylinder and said  
18           slide so that said transfer cable travels upward before connecting to said slide;

19           another pulley around which said cable passes between said slide and the first  
20           end of said cable;

21           a controllably rotatable seat attached to said carrier;

22           a harness attached to a locking apparatus connected to said carrier;

23           a pressurizable cylinder connected to an object which is so heavy that movement  
24           of the carrier will not appreciably move the object, said pressurizable cylinder having a  
25           piston slidably mounted within the cylinder and attached to the first end of said cable,  
26           said pressurizable cylinder also having an aperture for connection to a source of  
27           compressed fluid near an end of said cylinder, and said pressurizable cylinder having an  
28           aperture in that end of the pressurizable cylinder to allow said cable to pass through the  
29           end of the pressurizable cylinder;

30           a descent valve communicating with the interior of said cylinder;

31           an aperture in the side of said cylinder; and wherein:

32                 the first end of said cable is attached to a structure which will hold the first  
33                 end of said cable substantially stationary.

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